

# FREP®

FR-EPR/CPE, Instrumentation, Shielded  
600 V, UL Type TC, Individual and Overall Shielded Triads



### Product Construction:

#### Conductor:

- 18 AWG and 16 AWG tinned, annealed copper per ASTM B33
- Class B stranding per ASTM B8

#### Insulation:

- Flame-Retardant Ethylene Propylene Rubber (FR-EPR) Type II
- Color-coded per ICEA Method 1: Triads - black, white and red. One conductor in each triad is printed alpha-numerically for easy identification

#### Shield:

- Individual and overall shielded triads**
- Individual triads are 100% shielded with Flexfoil® aluminum/polyester in contact with stranded tinned copper drain wire
  - Overall shield is Flexfoil® aluminum/polymer in contact with stranded tinned copper drain wire

#### Jacket:

- Lead-free, flame-retardant, thermoplastic Chlorinated Polyethylene (CPE)

### Applications:

- In free air, raceways or direct burial
- In wet or dry locations
- Permitted for use in Class I, Division 2 industrial hazardous locations per NEC

### Features:

- Rated at 90°C wet or dry
- Ripcord applied to all cables with jacket thickness of 60 mils or less
- Excellent physical, thermal and electrical properties
- Excellent moisture resistance
- Excellent resistance to compression cuts and heat deformation
- Excellent flame resistance—burns to an ash; does not exhibit thermoplastic drip
- Low coefficient of friction for easy pulling
- Sunlight- and weather-resistant
- Excellent low temperature cold bend characteristics
- Meets cold bend test at -40°C

### Compliances:

#### Industry Compliances:

- UL 1277 Type TC, UL File # E57179
- UL 1581
- ICEA S-73-532/NEMA WC57
- RoHS Compliant

#### Flame Test Compliances:

- UL 1581/UL 2556 VW-1
- UL 1685 Vertical Flame Test
- IEEE 383
- IEEE 1202
- CSA FT4
- ICEA T-29-520

#### Other Compliances:

- EPA 40 CFR, Part 261 for leachable lead content per TCLP
- OSHA Acceptable

### Packaging:

- Material cut to length and shipped on non-returnable wood reels

CATALOG NUMBER	NO. OF TRIADS	COND. SIZE (AWG)	COND. STRAND	MINIMUM AVG. INSULATION THICKNESS		MINIMUM AVG. JACKET THICKNESS		NOMINAL CABLE O.D.		COPPER WEIGHT		NET WEIGHT	
				INCHES	mm	INCHES	mm	INCHES	mm	LBS/1000 FT	kg/km	LBS/1000 FT	kg/km

### INDIVIDUAL AND OVERALL SHIELDED TRIADS 18 AWG CONDUCTORS

337150*	2 TRI	18	7W	0.025	0.64	0.060	1.52	0.560	14.22	38	57	127	189
319250*	4 TRI	18	7W	0.025	0.64	0.060	1.52	0.640	16.26	73	109	201	299
319260*	8 TRI	18	7W	0.025	0.64	0.080	2.03	0.825	20.96	144	214	343	510
337160*	12 TRI	18	7W	0.025	0.64	0.080	2.03	1.065	27.05	218	324	528	786
294540*	16 TRI	18	7W	0.025	0.64	0.080	2.03	1.180	29.97	290	431	675	1005
337170*	20 TRI	18	7W	0.025	0.64	0.080	2.03	1.310	33.27	361	538	825	1228
337180*	24 TRI	18	7W	0.025	0.64	0.080	2.03	1.500	38.10	433	645	972	1447
337190*	36 TRI	18	7W	0.025	0.64	0.080	2.03	1.740	44.20	649	965	1470	2188

### INDIVIDUAL AND OVERALL SHIELDED TRIADS 16 AWG CONDUCTORS

280950*	2 TRI	16	7W	0.025	0.64	0.060	1.52	0.615	15.62	57	84	159	237
280960*	4 TRI	16	7W	0.025	0.64	0.060	1.52	0.705	17.91	108	160	249	371
280970*	8 TRI	16	7W	0.025	0.64	0.080	2.03	0.850	21.59	217	323	472	702
287410*	12 TRI	16	7W	0.025	0.64	0.080	2.03	1.160	29.46	328	487	683	1016
337200*	16 TRI	16	7W	0.025	0.64	0.080	2.03	1.290	32.77	436	649	879	1308
337210*	20 TRI	16	7W	0.025	0.64	0.080	2.03	1.380	35.05	545	811	1058	1575
337220*	24 TRI	16	7W	0.025	0.64	0.080	2.03	1.615	41.02	653	972	1266	1884
337230*	36 TRI	16	7W	0.025	0.64	0.110	2.79	1.920	48.77	979	1457	1918	2854

Dimensions and weights are nominal; subject to industry tolerances.

\* Non-stock item; minimum runs apply. Please consult Customer Service for price and delivery.

